

before achieving LTC, and 49% achieved LTC. The relative hazard of death before achieving LTC compared to surviving without achieving LTC decreased for those with a history of opiate substitution therapy (OST) (HR 0.19, CI 0.10 to 0.34) and increased for HIV positive participants (HR 6.2, CI 3.6 to 10.6), those who started injecting after 1985 (HR 2.5, CI 1.3 to 4.8), those aged over 18 years at first injection (HR 2.2, CI 1.4 to 3.6), and those with a history of overdose (HR 2.0, CI 1.3 to 3.2). The relative hazard of achieving LTC compared to surviving without achieving LTC decreased for those with a history of OST (HR 0.39, CI 0.27 to 0.56), those who started injecting after 1985 (HR 0.56, CI 0.39 to 0.79) and those with a prison history (HR 0.69, CI 0.54 to 0.89); and increased for those aged over 18 years at first injection (HR 1.6, CI 1.2 to 2.1).

Conclusions: Few cohorts have sufficient follow-up to measure long-term cessation. The Edinburgh Addiction Cohort (EAC) suggests that exposure to OST is protective, reducing the risk of death before long term cessation, but OST also seems to increase duration of injecting drug use, reducing the likelihood of long term cessation.

CVD and metabolic syndrome

085 STATINS FOR THE PRIMARY PREVENTION OF CARDIOVASCULAR DISEASE: CAUTION REQUIRED

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Background: Reviews of the effects of statins highlight the benefits of their use, leading expert committees to promote statin treatment on a global scale. However, most reviews have not distinguished between findings in primary and secondary prevention. Of the reviews which have attempted to look at the evidence for primary prevention, the role of statins is contradictory, leading to some scepticism among the cardiovascular community.

Objectives: To assess the effects, both benefits and harms, of statins in people without a history of CVD.

Methods: Systematic review of randomised trials comparing statins with usual care or placebo where duration of treatment was one year and follow up was six months. We searched Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE and EMBASE, until 2007. Data were extracted by two reviewers independently. Relative risk (RR) was calculated for dichotomous data and we used random effects models.

Results: Thirteen trials (14 arms) dating from 1995–2005 were located. A total of 43 150 participants were observed for up to 5.3 years; the mean age was 57 years (range 28–50 years), 71.7% were male, 92.8% were Caucasian. Three of the larger trials were stopped prematurely because significant reductions in primary outcomes between the intervention and placebo had been observed. Total mortality was reduced with the use of statins RR 0.84 (95% CI 0.75 to 0.94) as were all of the combined outcomes: fatal and nonfatal CVD events; RR 0.80 (95% CI 0.71 to 0.90); fatal and non-fatal CHD events RR 0.72 (95% CI 0.66 to 0.79) fatal and nonfatal stroke events RR 0.78 (95% CI 0.67 to 0.91). However, there was no strong evidence of benefit when single outcomes were evaluated. Of the seven trials reporting on adverse events, statins posed little harm. The majority of trials received industry sponsorship.

Conclusion: Composite endpoints were reported in preference to single end points and adverse events outcomes were not fully reported. Trials that were stopped prematurely may have contributed to an over-estimation of treatment effects. It is possible but unlikely that the results may not be generalisable to women, non-white people and those in old age. Caution in interpreting the results is required.

086 METABOLIC HEALTH CHANGES IN MIGRANTS MOVING FROM A RURAL TO AN URBAN ENVIRONMENT IN TANZANIA

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Background: High levels of rural to urban migration are a feature of most developing countries, and are thought to be associated with an increased risk of chronic non communicable diseases.

Aim: To investigate in adult rural to urban migrants in Tanzania changes in health related behaviours, BMI, lipids and blood pressure in the first 12 months following migration.

Methods: Through village key informants, men and women, aged 15 to 59, from Morogoro rural region intending to migrate to Dar es Salaam for at least 6 months were identified. Prior to migration and regularly (1 to 3 monthly) after migration, measurements were made, blood taken for lipids, and data on socio economic circumstances and aspects of life style collected by interview. For each migrant an age, sex and village matched non migrant was also assessed at baseline and 12 months later.

Results: Two hundred and nine migrants, 103 men and 106 women, had measurements prior to migration, mean age 28.0 (SD 11) and 29.5 (11) years respectively. At 12 months contact was maintained with 132 (63.2%) of the migrants. Following migration there were significant changes in diet, with migrants consuming more meat, fresh vegetables, coconut oil and margarine. Self reported regular physical activity declined, from 79% of men to 27% (95% CIs 39% to 58%) and 38% of women to 14% (7% to 36%). At 12 months migrants, compared to the non-migrants, had a higher BMI (by 0.64 kgm⁻², 95% CIs 0.28 to 1.0) and serum cholesterol (0.57 mmol l⁻¹, 0.27 to 0.88), but lower systolic (5.2 mm Hg, 1.7 to 8.5) and diastolic blood pressure (7.4 mm Hg, 5.1 to 9.7). Triglycerides were lower in migrants at 6 months (0.31 mmol l⁻¹, 0.06 to 0.58) but not at 12 months. Multiple linear regression was used to identify predictors of change in biological variables following migration. Associations (p<0.05) were found with aspects of diet for BMI, blood pressure, cholesterol and triglycerides, and increasing BMI predicting increasing triglycerides.

Conclusion: This relatively small study of rural to urban migrants in Tanzania found changes with mixed consequences for health following migration. Despite falls in physical activity and an overall tendency to increasing weight and cholesterol, there were apparently significant falls in blood pressure and (over the first 6 months) in triglycerides. Our tentative hypothesis is that changes in diet, from one dominated by carbohydrate to one of greater diversity, lead to favourable triglyceride and blood pressure changes, but that as weight increases these changes will be reversed.

087 HIGH BURDEN OF CARDIOVASCULAR DISEASE AND RISK PROFILE IN AN ELDERLY EASTERN GERMAN GENERAL POPULATION—POTENTIAL EXPLANATION FOR AN EAST–WEST GRADIENT OF CARDIOVASCULAR MORTALITY: THE CARLA STUDY 2002–2006

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Background: For cardiovascular diseases (CVD), an east-west mortality gradient across Europe has been described, which could not fully be explained by established risk factors. Likewise, the cause of the higher CVD mortality in eastern as compared to